County of Loudoun

Department of Planning

MEMORANDUM

DATE: May 7, 2007

TO: Leesburg Annexation Area Development Policies (AADP) Committee

FROM: Susan Berry Hill, Program Manager

SUBJECT: **Countywide Transportation Plan (CTP) Update - Crosstrail Boulevard Analysis**

This memo and attachment serves to provide more information to the AADP Committee regarding item #3 on the May 10, 2007 agenda. On April 30, 2007, the consultant working with the County on the update to the Countywide Transportation Plan (CTP) provided a presentation on their transportation network analysis. Included in the analysis was Leesburg's request to reinstate a segment of Crosstrail Boulevard, from Route 621 to Route 15. Excerpts from that presentation relating to Crosstrail Boulevard have been provided as packet materials for the AADP Committee.

The analysis assumed a 4-lane facility. Two scenarios were tested: Crosstrail connecting directly to Route 704 and Crosstrail connecting to Route 15 at a point south of Route 704. The general results of the analysis showed:

Aligned with Route 704:

- Crosstrail Blvd. carried 15,000 average daily trips (ADT).
- The total 704/Crosstrial alignment induced less than 2000 ADT on Route 704
- Relieves some traffic of Route 15 traffic

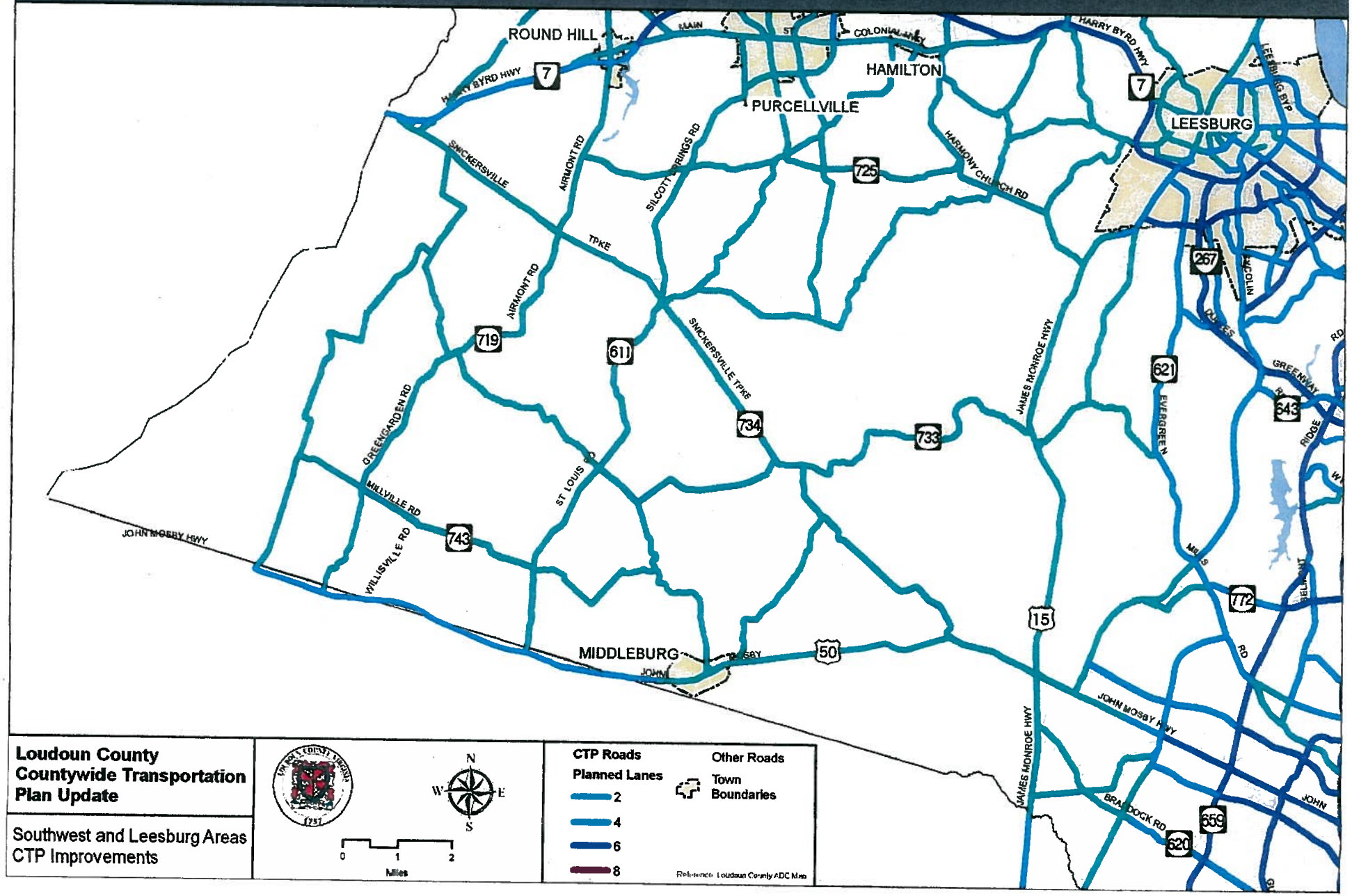
Not aligned with Route 704:

- Crosstrail Blvd. carried 8,000 ADT
- Additional intersection with Route 15 results in degradation of Level of Service on Route 15 (LOS A-C to D)

Staff from the Office of Transportation Services (OTS) will be at the meeting on May 10, 2007 to further explain the analysis.

ATTACHMENT 2

Southwest Loudoun/Leesburg – CTP Roads



2030 CTP Congestion

Loudoun County Countywide Transportation Plan Update

CTP Baseline 2030
Level of Service

N
W E
S

0 2 4
Miles

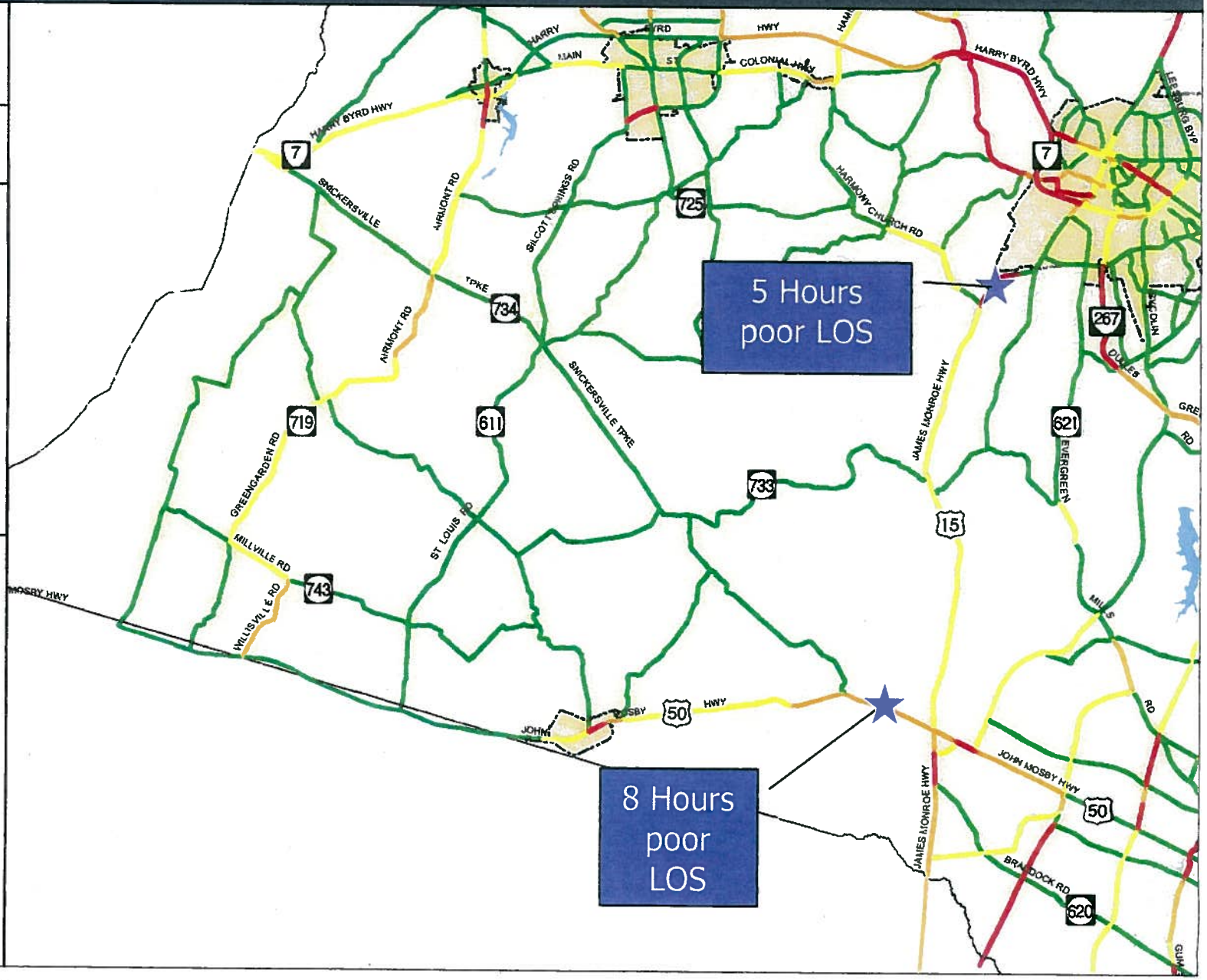
Legend

CTP Baseline LOS

A-C D E F

Other Roads

Town Boundaries



Reference: Loudoun County ADT Map

Alternative 1 Improvements

Loudoun County Countywide Transportation Plan Update

Alternative 1: 2030 Ultimate Improvements

N
W E
S

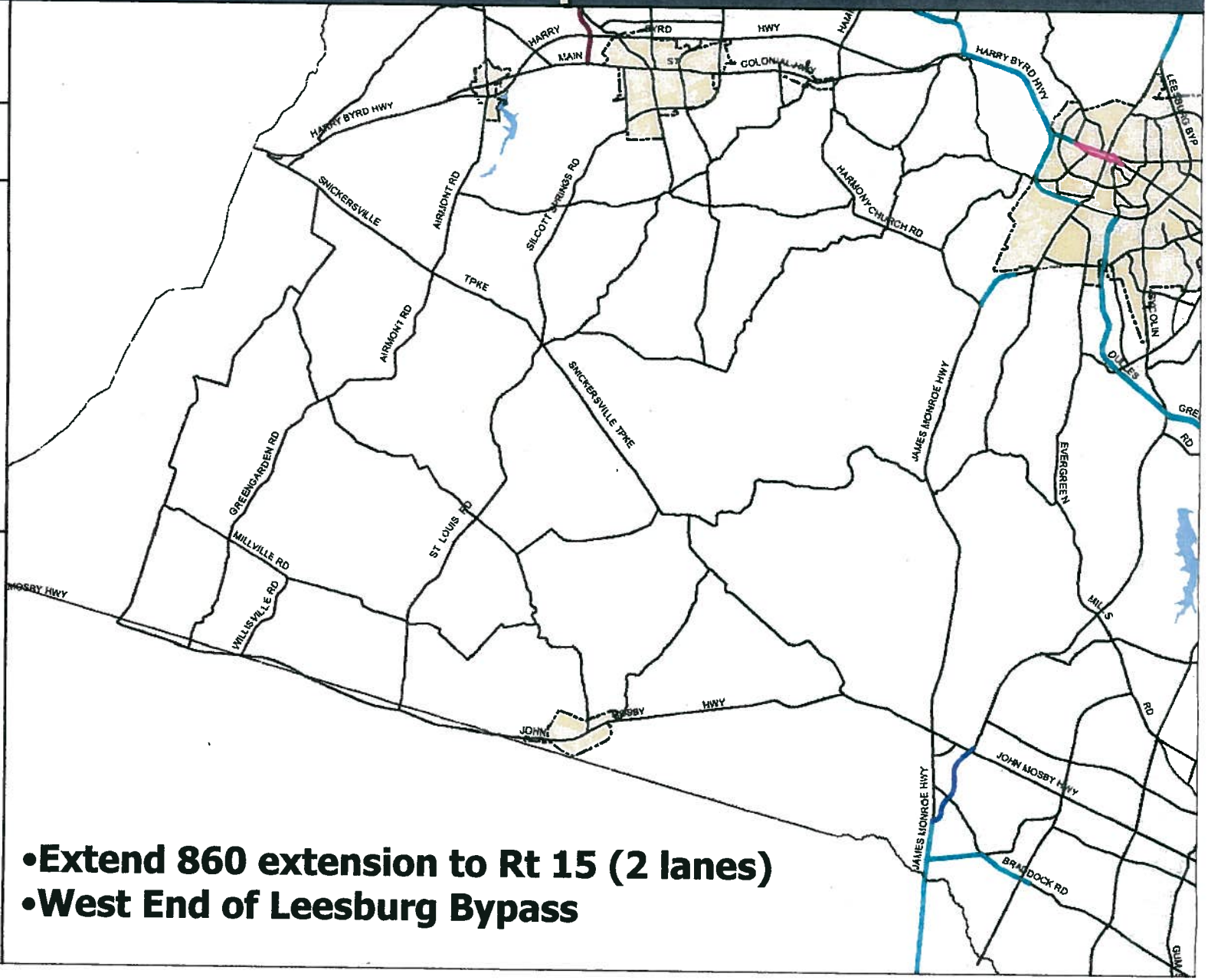
0 2 4
Miles

Legend

Alternative 1 Improvements

- Add 2 Lanes
- New 2 Lane Road
- New 4 Lane Road
- One-Way Pair
- CTP Roads
- Other Roads
- Town Boundaries

Reference: Loudoun County ADC Map



•Extend 860 extension to Rt 15 (2 lanes)
•West End of Leesburg Bypass

Alternative 1 Results

Loudoun County Countywide Transportation Plan Update

Alternative 1: 2030
Level of Service

N
W E
S

0 2 4
Miles

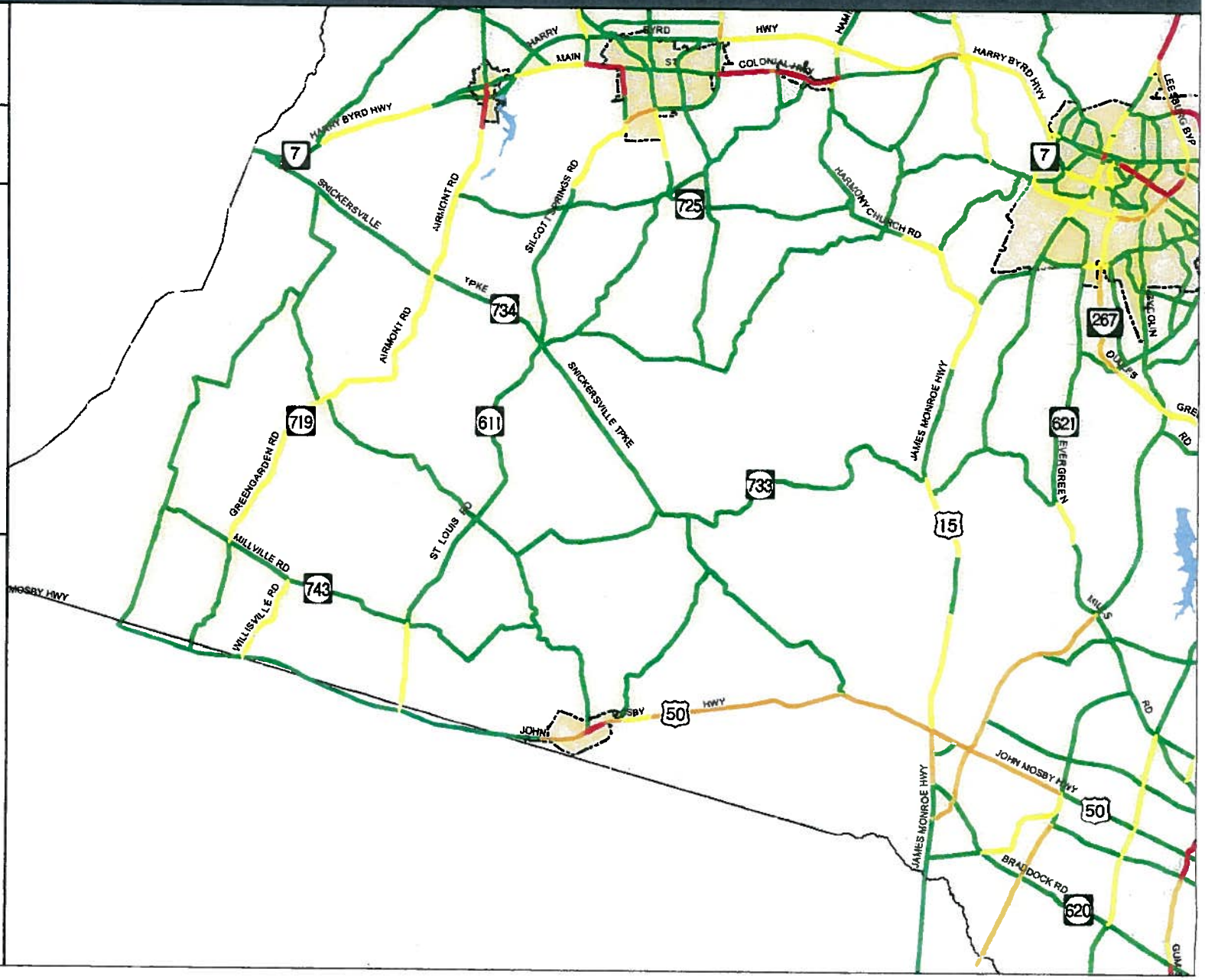
Legend

Alternative 1 LOS

A-C D E F

Other Roads

Town Boundaries



Reference: Loudoun County ArcGIS Map

Alternative 2 Improvements

Loudoun County Countywide Transportation Plan Update

Alternative 2: 2030
Ultimate Improvements

N
W E
S

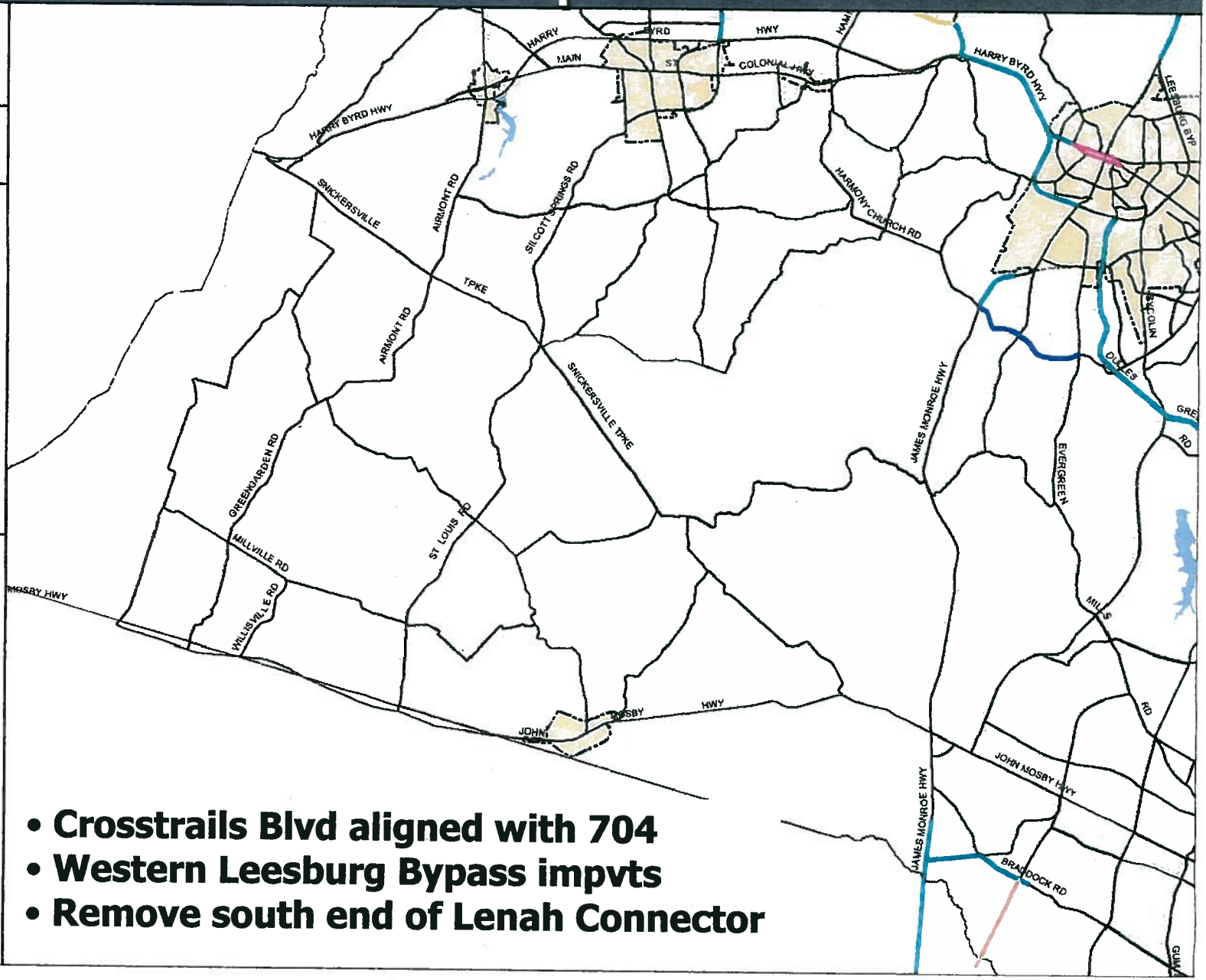
0 2 4
Miles

Legend

Alternative 2 Improvements

- Add 2 Lanes
- New 4 Lane Road
- One-Way Pair
- Traffic Calming
- Remove Road
- CTP Roads
- Other Roads
- Town Boundaries

Reference: Loudoun County ADC Map



- **Crosstrails Blvd aligned with 704**
- **Western Leesburg Bypass impvts**
- **Remove south end of Lenah Connector**

Alternative 2 Results

Loudoun County Countywide Transportation Plan Update

Alternative 2: 2030 Level of Service

N
W E
S

0 2 4
Miles

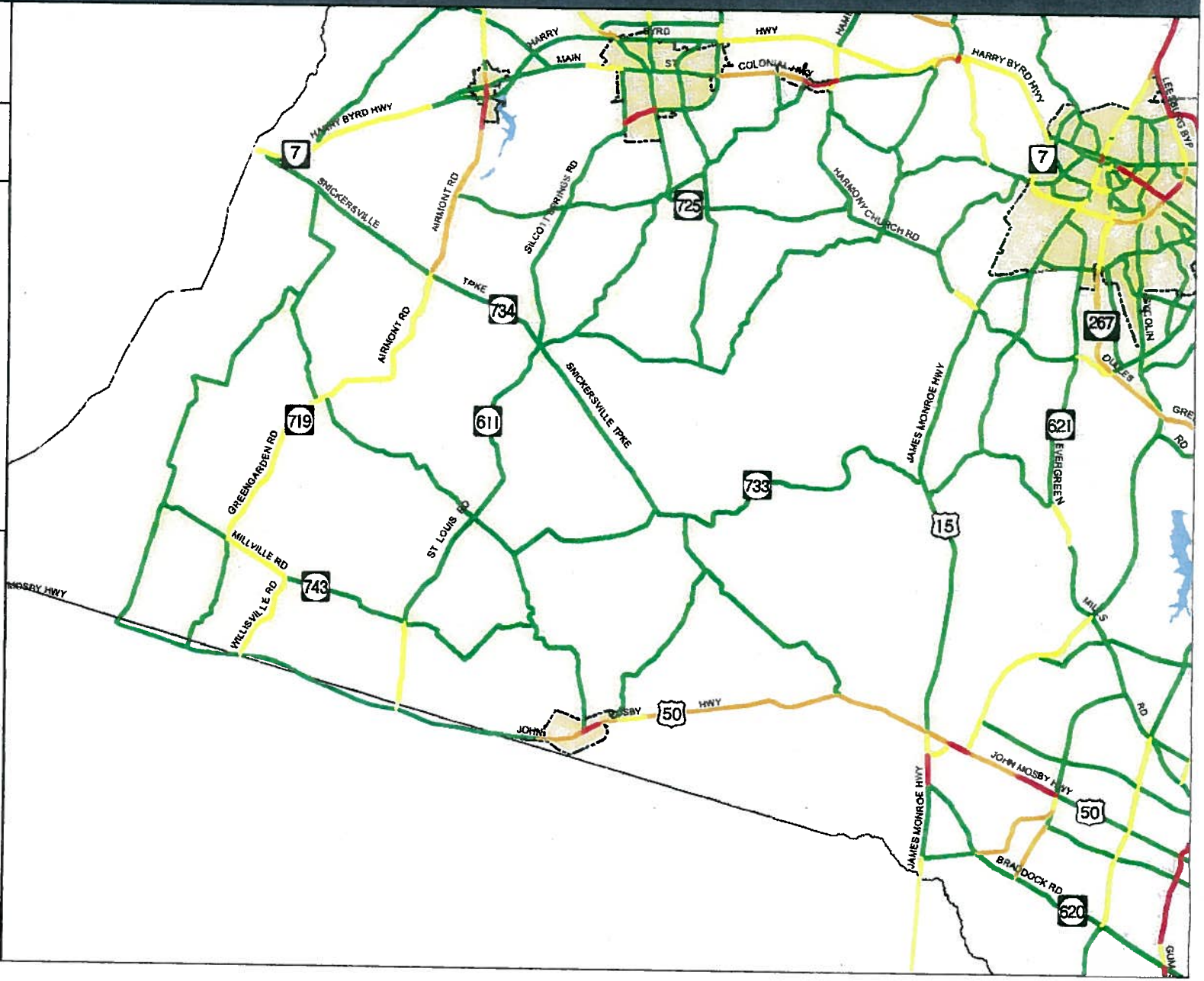
Legend

Alternative 2 LOS

A-C D E F

Other Roads

Town Boundaries



Reference: Loudoun County ADC Map

Alternative 3 Improvements

Loudoun County Countywide Transportation Plan Update

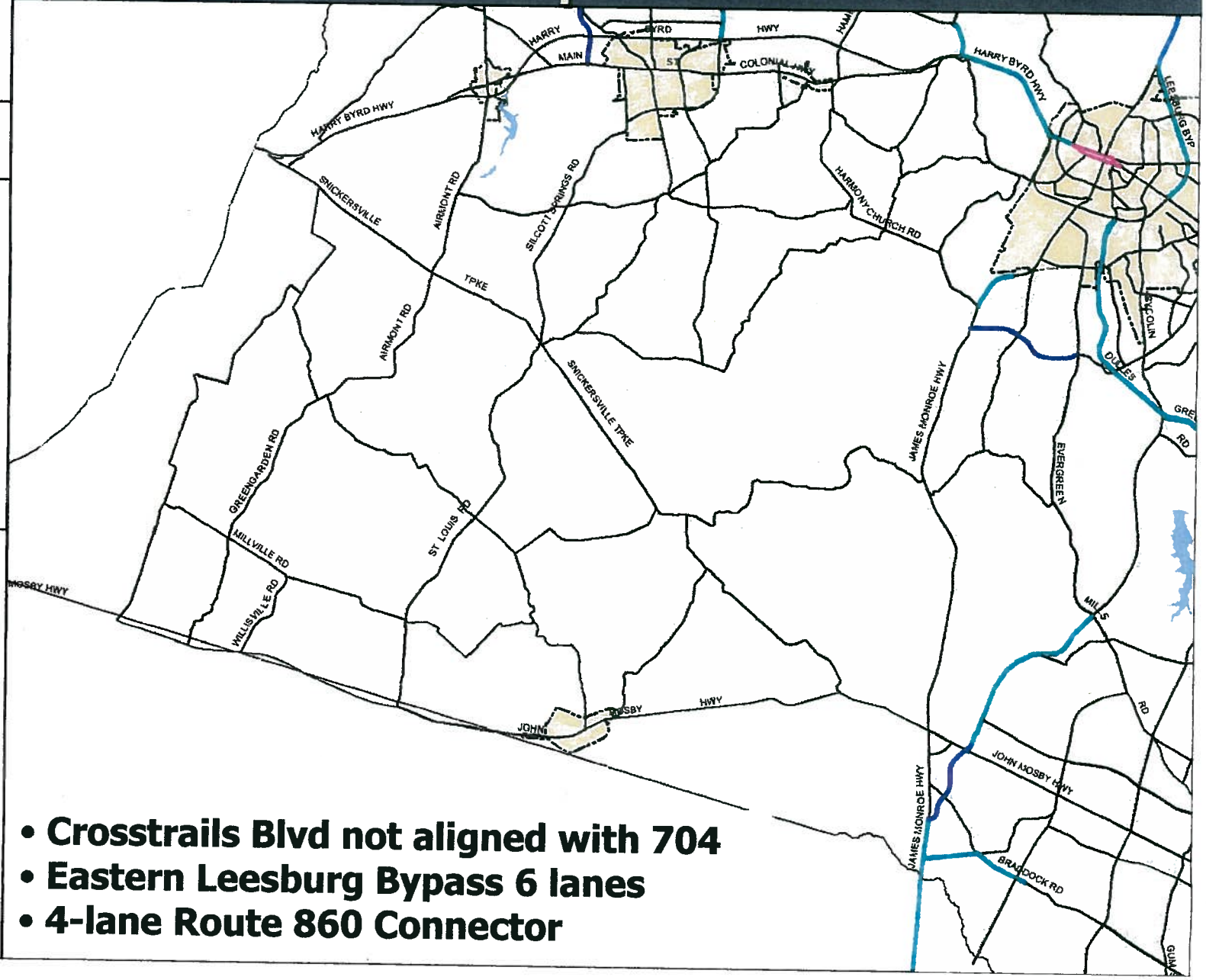
Alternative 3: 2030 Ultimate Improvements

Legend

Alternative 3 Improvements

- Add 2 Lanes
- Add 4 Lanes
- New 4 Lane Road
- One-Way Pair
- Traffic Calming
- CTP Roads
- Other Roads
- Town Boundaries

Reference: Loudoun County ADC Map



- **Crosstrails Blvd not aligned with 704**
- **Eastern Leesburg Bypass 6 lanes**
- **4-lane Route 860 Connector**

Alternative 3 Results

Loudoun County Countywide Transportation Plan Update

Alternative 3: 2030 Level of Service

N
W E
S

0 2 4
Miles

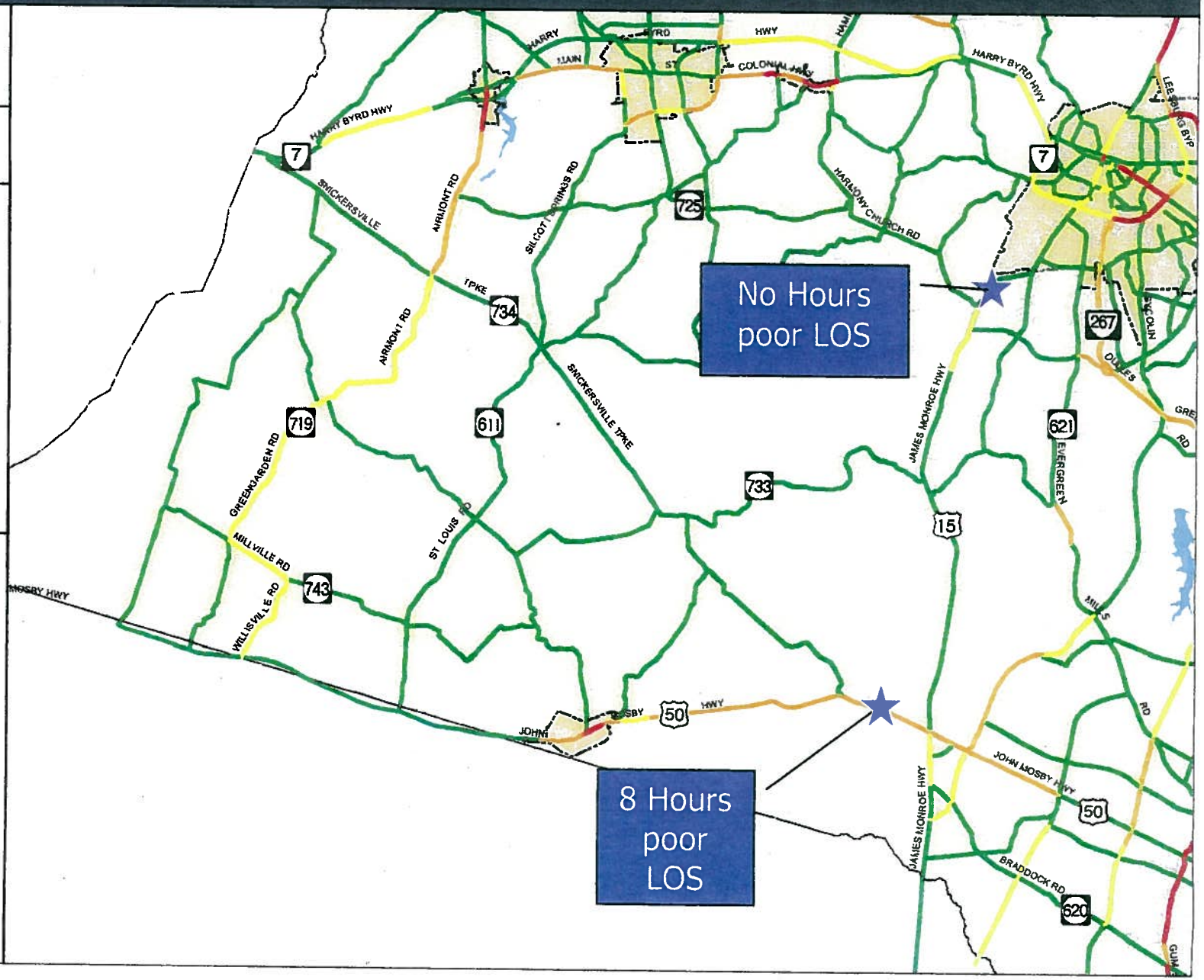
Legend

Alternative 3 LOS

A-C D E F

Other Roads

Town Boundaries



Other Observations

- Crosstrails Blvd Alternatives
  - Induce less than 2,000 ADT on Route 704
  - Carries 15,000 ADT when aligned with Rt 704
  - Carries 8,000 ADT when not aligned
  - Relieves some Rt 15 traffic – more so when aligned with Rt 704.
- Gilberts Corner and Route 860 Extension
  - Rt 860 Extension relieves Gilbert's corner southern approach and westbound Rt 50
  - 4-lane version substantially more effective